On the Move with the Mobile Web: Libraries and Mobile Technologies Ellyssa Kroski

How to Create a Mobile Experience

what we've seen the benefits and challenges of the mobile Web, its capabilities, practical applications, and ways libraries are making use of it, it's time to think about whether developing a mobile presence is right for you. To that end, the first thing that you will want to do is determine a mobile strategy.

Developing a Mobile Strategy

Organizations will want to consider not only the technology capabilities of the mobile Web and the associated devices, but their user base, or patrons, as well when determining their mobile strategy. Who are your users, and are they ready for the mobile Web? Will they understand the value of your presence there, and do they have the ability to learn how to use what you build?¹ The majority of current mobile Web users are in a young demographic category ranging in age from 18 to 27, and they are using the portable Internet for social and viral activities that connect them to other users. Will you be providing services for this type of person? Other mobile users include business travelers and an older demographic who are using the mobile Web to seek out information on the go. Does your organization have something to offer these people?

When considering what type of mobile presence to create, it will be helpful to create a profile of your patrons incorporating not only their age range and informationseeking behavior, but also what types of mobile phones they will be using. Do the majority of your patrons own iPhones and high-end mobile devices, or do they own basic phones that may be using older technology? This will be key in determining factors such as programming language you want to use, media types to include or exclude, and whether or not it's appropriate for you to "go mobile" at this time.

A smart strategy to adopt when developing for the mobile Web is starting small and allowing room to learn. Experiment with trial initiatives that will provide valuable experience with mobile technology, and assess their impact based on user feedback. Move on to providing some basic services from a simple Web site before tackling a complex Web application. Organizations will want to carefully consider what types of content and services they want to bring to the mobile Web. Creating a mobile Web experience is not about transforming an entire Web site into a miniature version of its desktop counterpart; it is about providing valuable information for people who do not have access to a personal computer. The mobile user is not going through the "pain" of accessing a mobile Web site to read a mission statement; they can do that at home. They are going there with a purpose or a need, whether that is to take an action, such as putting a book on hold, or to find a piece of information, such as the start time of a workshop. It is your objective to determine what that need is, and fill it.

Clever organizations will capitalize on the mobility of this type of information experience. Instead of simply translating what you are already doing on the Internet, consider the opportunities that this new channel provides. What services can you offer that aren't possible on the desktop Web? Think about location-based services, downloadable content, and "push" text alerts, to name a few. And consider more than just new services: contemplate whether there are new users you can reach by virtue of your mobile initiative.

Just as with the desktop Web, it is important to understand the limitations and possibilities of the technology at hand, as well as the needs of your users. By exploring and evaluating both of these fundamental elements, organizations will be able to establish a successful approach for creating a mobile Web experience.

7 Reasons to Go Mobile

- ✓ There are 3 times as many mobile phones in the world than personal computers.
- ✓ Mobile makes your content ubiquitous
- ✓ Mobile diversifies your audience
- ✓ Mobile enables you to offer new types of services (e.g., location-based).
- ✓ Mobile enables you to connect to patrons in a new medium
- ✓ Mobile is the way of the future
- ✓ It's easier than you think

The Nuts and Bolts of Going Mobile

Organizations that are considering the mobile Web have the choice of several methods to provide mobile content to their patrons. A standard approach has yet to be resolved, leaving the decision up to individual organizations; they will need to weigh the pros and cons of each solution or combination thereof to determine the right fit for them.

Take No Action

After all this discussion concerning appropriate strategies for bringing your content to the mobile Web, the concept of taking no action may seem contradictory. But the fact is that if you have a Web site, you are already a part of the mobile Web. And between advanced devices such as the iPhone, innovative browsers such as Opera, and automatic transcoding by major search engines, your site might not look all that bad with no extra effort on your part. Test the appearance, display, and functionality of your Web site on a variety of phones to determine if any action is necessary at this time. Alternatively, you may have determined during your strategy phase that the mobile channel is not right for your demographic at all, and that you actually may not want to reach people through this method.

Push Content via Mobile Alerts

Mobile alerts are text messages that are delivered to users' cell phones to notify them of an event, breaking news item, or other occurrence about which they have requested to be informed when subscribing to the service. This method, which is an excellent way to "push" information and strengthen user ties with organizations, is already being utilized by libraries in a variety of ways. There are many free applications, such as Mozes, Broadtexter, and others, that enable organizations to send simultaneous text messages to a list of subscribers. Although this doesn't solve the problem of a mobile-enabled Web site, it is a way to connect to patrons via the mobile Web without a large investment of time or funds, and it can be used quite effectively in conjunction with some of the other methods discussed in this section.

Mozes www.mozes.com

Broadtexter www.broadtexter.com

Mobile Style Sheets

Organizations with simple Web sites and some development resources can create a mobile CSS (Cascading Style Sheet) style sheet geared specifically for handheld devices. This is an additional style sheet to the one which is used for a regular Web site and is brought into play when the user accesses the site from a mobile browser. The style sheet simplifies the layout and optimizes the Web site experience for the small screen display. This method works well with basic Web sites that have content that can be easily reduced to bare bones. Although handheld style sheets are not supported on all devices, this is a quick way to develop a mobile presence without having to develop a separate Web site.

Mobile Marketing Tips

- Prominently advertise your mobile site on your home page, blog, and social networking profiles.
- Create incentives, such as downloadable content, for users to try out your mobile Web site.
- ✓ Add your mobile site to aggregators and directories such as FeedM8
- ✓ Integrate "push" campaigns to drive traffic to your mobile site.

Transcoded Web Sites

Transcoding is a technology that takes a regular Web site and reformats it for display on a tiny mobile screen. When you are using a mobile device, many search engines, including Google, will return a results list including transcoded versions of Web pages, along with any mobile editions of the site. But developers, as well as users, can transcode Web sites directly through a free transcoding application such as Skweezer and Mowser, which compresses the HTML content of a Web site to produce a single-column, Spartan version of the original that can be viewed through a mobile browser. Transcoded Web pages are viewable by a wide range of mobile phones; however, the automatic nature of the Web page transformation often results in excessive scrolling and less-than-perfect displays.

Skweezer www.skweezer.net

Mowser www.mowser.com

Mobile-Only Web Sites

Sixty-two percent of executives who are responsible for their company Web sites already have a mobile site or plan to have one in the next 12 months, according to a JupiterResearch survey.² Designing a mobile-specific Web site provides more freedom in design, content, and structure of a portable Web page, but also requires additional decisions about the type of technology and format to develop it in. Right now there is no all-encompassing development strategy, mainly due to the fact that there is no uniformity of devices, operating systems, or browser standardization.

A new programming language called XHTML-MP allows developers to create robust mobile Web sites, but it is viewable only on newer, high-end devices, while the older, less feature-rich WML, or Wireless Markup Language, is compatible with mass-market phones, making it the safer choice. The currently evolving mobile landscape, reminiscent of the early days of the Web when dial-up still prevailed, makes it difficult to decide which technology to align oneself with, and many businesses and organizations are choosing to create multiple sites. Apple's iPhone further complicates matters as it adds a unique device type to consider.

There are many free applications, such as Winksite and MoFuse, to help organizations create their own mobile Web sites. These programs create mobile versions of Web sites from RSS feeds. They also provide tools to create QR barcodes; create widgets for desktop Web sites offering to send the mobile URL to visitors who enter their phone numbers; embed code for adding the site to blogs or other Web sites; create iPhone-only Web sites; and create links to share Web sites with social networks and communities. Applications such as Zinadoo and dot-Mobi's Site Builder provide FrontPage-like development interfaces for creating mobile Web sites from scratch.

Winksite

http://winksite.com

MoFuse www.mofuse.com

Zinadoo www.zinadoo.com

dotMobi http://mtld.mobi

Tips for Designing a Mobile Web Site

Keep It Simple—Bear in mind the limitations of today's mobile devices. 97% of users don't have QWERTY keyboards on their phones. As of the end of 2007, only 13% of phones were 3G-enabled, and a mere 17% capable of showing videos.*

Keep Customization on the Desktop—Enable users to do all the "heavy lifting," such as setting up user profiles and adjusting preferences, on their desktop computers, as these tasks are time-consuming and difficult on a mobile device.

Test Broadly—Mobile Web sites may display differently on various browsers and phones. Therefore, it is optimal to test your Web pages on as many distinct devices as possible. There are free Web-based emulators that can assist you with this effort.

Incorporate Search—Due to the difficulty of navigating the mobile Web, adding a search option near the top of your Web site will save precious time and patience for mobile users, who are frustrated by excessive scrolling.

Remember Usability—Proper information architecture is more important than ever on the mobile (cont.) (cont. from page 41)

Web. Design for one column, and put the most important content at the top of the page so that users don't have to scroll to find crucial items such as site navigation.

Clean Up Images—Restrict the number of unnecessary and purely decorative images you use on your mobile Web site. Create descriptive alternate titles for all image files, as many people browse the mobile Web with images turned off.

Provide Mobile-Appropriate Content—Think about how you can leverage your existing content and services for mobile use, as well as ways you can develop new offerings for the user on the go.

*Julie Ask, "Mobile Websites: Designing for Mobility," Jupiter Research, Jan. 11, 2008.

Creating for Mobile Resources and Reports

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Notes

- 1. Vidya Lakshmipathy, "Social Computing Goes Mobile," Forrester Research, Dec. 3, 2007.
- Neil Strother, "Mobile Web Sites: Building Sites That Are Best Able to Enhance Brands and Boost Ad Revenues," Jupiter Research, Sept. 5, 2007.